

*Description.* The proportional measurements of the holotype and paratypes are expressed as percentage of the SL in Table 1.

Dorsal rays XIII,  $10\frac{1}{2}$ ; anal rays III, 5; pectoral rays 17; gill rakers on first arch 15–17 (including rudiments); vertical scale rows above lateral-line from upper edge of gill opening to base of caudal fin 47–48; horizontal scale rows from lateral-line to base of fourth dorsal spine 6–7; from lateral-line to anus 12–13.

Body moderately compressed, snout pointed. Depth of body 2.8 (2.6 to 2.7), head length 2.2 (2.3 to 2.4), both in standard length. Snout 3.8 (4.1 to 4.3), eye diameter 3.7 (3.2 to 3.4), interorbital width 6.8 (6.1 to 6.5), length of maxillary 2.4, least depth of caudal peduncle 3.9 (3.7 to 4.1), length of caudal peduncle 4.9 (4.1 to 4.4), of pectoral fin 1.5 (1.4), of pelvic fin 1.7 (1.5 to 1.7), of first dorsal spine 8.3 (6.7 to 6.9), of fifth dorsal spine 3.5 (3.1

TABLE 1  
*Measurements of the type specimens of Scorpaenodes steenei*  
(expressed in thousandths of the standard length)

Characters	Holotype WAM P25178-006	Paratypes	
		USNM 214679	AMS I.18461-001
Standard length (mm)	93.0	97.2	99.8
Greatest body depth	360	388	366
Head length	445	412	431
Snout length	118	96	105
Eye diameter	120	128	125
Interorbital width	66	64	70
Maxillary length	183	175	180
Caudal peduncle least depth	115	111	105
Caudal peduncle length	91	101	98
Snout to dorsal fin origin	404	412	368
Snout to anal fin origin	753	736	792
Snout to pelvic fin origin	430	375	476
Length dorsal fin base	583	602	574
Length anal fin base	157	154	145
Length pectoral fin	306	288	308
Length pelvic fin	269	275	258
Length 1st dorsal spine	54	62	62
Length 5th dorsal spine	129	132	136
Length penultimate dorsal spine	60	62	69
Longest soft dorsal ray	161	159	167
Length 1st anal spine	98	93	98
Length 2nd anal spine	196	188	193
Length 3rd anal spine	159	144	145
Longest soft anal ray	204	211	215
Length caudal fin	271	247	240

to 3.2), of penultimate dorsal spine 7.4 (6.2 to 6.7), of longest soft dorsal ray 2.8 (2.6), of first anal spine 4.5 (4.4), of second anal spine 2.3 (2.2), of third anal spine 2.8 (2.9 to 3.0), of longest soft anal ray 2.2 (2.0), of caudal fin 1.6 (1.7 to 1.8), all in the head length.

Pair of relatively large nasal openings on each side of snout, anterior opening with elevated rim and dermal flap posteriorly; mouth large and oblique, terminally located; lateral-line gradually descending on sides from upper corner of gill opening to base of middle caudal rays; lips, chin, dentary, and isthmus naked; remainder of head and body covered with ctenoid scales; sheath scales covering base of soft dorsal, anal, and caudal fins, and about basal  $\frac{1}{3}$  of pectoral fin; suborbital ridge with 5–8 spines; secondary row of 3–4 spines below

suborbital ridge; preopercular bone with 6 spines on posterior margin; coronal or interorbital ridge present with spine posteriorly; other spines present include nasal, pre-, supra-, and postocular, anterior and posterior parietal, upper and lower posttemporal, opercular, postfrontal, tympanic, pterotic, sphenotic and cleithral; jaws with bands of small granular teeth; vomer with similar teeth; palatines toothless.

Colour of holotype in ethyl alcohol: ground colour of head and body pale (yellowish); head with diagonal blackish bar from postero-ventral corner of eye to lower edge of preopercle; short blackish bar below middle of eye to lower edge of suborbital; prominent blackish spot, larger than pupil, on middle of opercle; blackish bar across occipital region connecting postero-dorsal corner of each orbit; dusky blotches on nape and sides below dorsal spines 1-8; prominent blackish spot, smaller than pupil, slightly anterior to and above cleithral spine; three irregular transverse bars on sides below soft dorsal and last few dorsal spines, dusky grey in colour and interconnected horizontally above lateral-line; spinous dorsal fin dusky with series of oblique pale bands; soft dorsal and anal fins similar to spinous dorsal on basal portion, but outer half mostly translucent except distal part of last three rays dusky; pelvics, pectorals, and caudal fin mostly pale yellowish to translucent; pectoral and caudal fins with faint dusky bar at base.

The paratypes are similar in coloration except they exhibit 3-4 faint grey crossbands on the caudal fin and an additional bar on the middle of the caudal peduncle which is connected horizontally with the bar at the caudal base.

Colour of 97.2 mm paratype in life (from ektachrome slide taken by R. Steene): ground colour of head and body pink with blackish markings on head as described above; snout and lips red; bars and blotches on body dusky grey suffused with reddish; bars on caudal peduncle reddish; base of dorsal fin mostly red; anal fin with oblique alternating bands of red and white; caudal fin with series of narrow reddish crossbands; lower half of pectoral fin red with narrow white crossbands, upper part of fin pink with white bands less apparent.

*Remarks.* The genus *Scorpaenodes* contains about 12 species, most of which are confined to the tropical Indo-West Pacific. *Scorpaenodes steenei* appears to be most closely related to *S. parvipinnis* (Garrett, 1863), a species which is widely distributed in this vast region. These two differ from most other *Scorpaenodes* by a combination of characters which include more than 45 series of scales above the lateral-line, a well developed interorbital ridge and associated apical spine, a row of secondary spines below the suborbital ridge, and a slightly higher soft dorsal ray count ( $9\frac{1}{2}$ - $10\frac{1}{2}$  v.  $8\frac{1}{2}$ ). *Scorpaenodes steenei* is separable from *S. parvipinnis* in several important respects including a higher soft dorsal count ( $10\frac{1}{2}$  v.  $9\frac{1}{2}$ ), fewer suborbital ridge spines (5-8 v. 12-15), and a taller spinous dorsal fin (longest spine 3.1 to 3.5 in head length v. 4.2 to 4.5 for *S. parvipinnis*). Two specimens of *S. parvipinnis*, 48.5 and 72.0 mm SL, from the Solomon Islands were examined.

*Etymology.* This species is named in honour of Mr. Roger Steene of Cairns, Queensland, who helped the author in procuring the first known specimens (paratypes) and also provided a colour photograph. In addition, Mr. Steene kindly assisted the author at his own expense on a trip to the Dampier Archipelago during October-November 1974.

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*References*

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## PLATE I

*Scorpaenodes steenei*, holotype, 93·0 mm SL, Rottnest Island, Western Australia.

